MATTERS ARISING

Laboratory techniques for the diagnosis of chlamydia infections

We read with interest the article by Taylor-Robinson[1] on laboratory diagnosis of chlamydia infections as we had done a prospective trial on chlamydia serology. The aim of the study was to determine the correlation between chlamydia serology and ELISA antigen detection (IDEIA Chlamydia test) in the diagnosis of uncomplicated genital chlamydia infection.

Patients attending the genitourinary medicine department at the Coventry and Warwickshire hospital were enroled. Following a standard genitourinary medical history, and an examination, chlamydia swabs were obtained from the urethra in the males and cervix in the females in the routine manner (along with other screening tests). In males urine had been held for 2–4 hours. The swabs obtained were transported in a chlamydia transport medium and the IDEIA Chlamydia test (Novo Bio Labs Ltd) was used for the antigen detection. The blood sample obtained for syphilis serology was saved for the estimation of anti chlamydia IgG and IgA antibodies using the IPAzyme immunoperoxidase test (Biological industries Ltd). Samples were tested in doubling dilutions 1/16 to 1/128 for the estimation of IgG and 1/8 to 1/64 for IgA, in patients who were found to be positive on IDEIA Chlamydia test and a similar control group which was negative. The control group had no history of recent antibiotic therapy; however, some of their partners belonged to the chlamydia positive group. Total of 31 IDEIA Chlamydia test positive patients and 26 negative patients were enroled and the results are given in the table.

IDEIA ag detection is of moderate sensitivity and relatively high specificity and the predictive value of a positive result will be high in a high prevalence population,[1] such as in a genitourinary medicine clinic. Chlamydia serology has been claimed by others to show high sensitivity, good negative predictive value but lower specificity in different populations.[2,3]

In this study, irrespective of the dilutions used or a combination of IgA and IgG titres, no statistical difference was seen between the groups. There was no apparent correlation between the presence or absence of chlamydia antibody and the antigen, using the laboratory techniques mentioned earlier.

Although firm conclusions can not be made on this limited study our results do agree with the conclusions Taylor-Robinson made on the "dubious value" of the chlamydia serology in the diagnosis of nonspecific urethritis in men or uncomplicated cervical infection in women.

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Table Comparison of chlamydia serology in chlamydia positive and negative groups

Antibody dilution	*Chlamydia positive group N = 31 (%)*	*Chlamydia negative group N = 25 (%)*
IgG > 1/16 to < 1/32	10 (32)	10 (40)
IgG > 1/64	23 (74)	20 (80)
IgA > 1/8 to < 1/16	5 (16)	10 (40)
IgG > 1/64 IgA > 1/8 to < 1/32	5 (16)	7 (28)
IgG > 1/16 to < 1/32 IgA > 1/8 to < 1/32	5 (16)	10 (40)

No statistical difference seen using chi square test.

Genital human papillomavirus lesions of the male sexual partners: the diagnostic accuracy of peniscopy

We were interested to read the article by Hippeläinen *et al*[1] concerning peniscopy and the carriage of human papillomavirus (HPV) DNA by male partners of women who had abnormal Papanicolaou smears. If we are to assume that HPV is transmitted predominantly by sexual contact,[2] it follows that men are involved in about half of the epidemic. This factor does not seem to be reflected in the current literature, which, despite the explosion of interest in the topic, still constitutes only a small minority of the publications. For example, only 20 (4·7%) of 424 papers presented at the recent papillomavirus workshop in Seattle directly concerned male carriage of HPV. This paucity of data is presumably, at least in part, due to the lack of a male counterpart of the Papanicolaou smear, which forms the basis of much current epidemiological work. The study of Hippeläinen *et al* is, therefore, a significant contribution to the field. However, we would like to raise several points.

The term "peniscopy" has been used previously,[3] but other authors use terms such as "androscopy",[4] "magnified penile surface scanning"[5] and, probably the least appropriate term, "colposcopy".[6] We suggest that the term "penoscopy" should be adopted, as its form is more consistent with the words used to describe other techniques which augment clinical visualisation, such as gastroscopy and bronchoscopy.

The whole area of HPV epidemiology is bedevilled by the absence of a universally agreed "gold standard". Clearly, from the data presented in this article, histology alone cannot be relied upon, as only 34 (35·4%) of 96 biopsies that showed histological criteria of HPV infection contained HPV DNA. As detection was not only by in situ hybridisation but also by the PCR, it seems likely that most of the lesions biopsied did not contain the so-called "genitotropic" HPVs tested for. This is surprising, as in most studies DNA of the genitotropic HPVs has been detected in approximately 90% of condylomata acuminata.[7] Several explanations are possible for these observations. Penoscopically abnormal areas may be caused by HPV types which are dif-

ferent from those usually found in clinically apparent lesions. Alternatively, such lesions may be produced by mechanisms entirely different from infection with HPV. The fact that the authors, along with others,[8] noted that penoscopic abnormalities occurred commonly at sites of likely epithelial trauma during intercourse, may be relevant. The finding that males with a long contact history had a lower incidence of abnormalities might be consistent with the observations that older genital HPV lesions contain fewer viral particles than fresher lesions[9] and are less infectious.[2] It could be postulated that men who have had long term contact with women infected with HPV are, at the time of sampling, being exposed to a small viral load, and so are possibly less likely to have penile abnormalities attributable to HPV infection.

It is unfortunate that the men did not undergo full testing for other sexually transmitted diseases, for example, a urethral smear to detect non-gonococcal urethritis and syphilis and HIV serology. Furthermore, the finding that none of the men carried *Chlamydia trachomatis* in the urethra suggests that the population sampled was an unusual one. Several reports[10 11] suggest that other infectious agents exist often in a large proportion of those with condylomata acuminata, and co-infection has been postulated to affect the natural history of HPV infections.[12]

The observation of a much greater correlation between histological criteria and the detection of HPV DNA in meatal and distal urethral biopsy specimens than elsewhere was interesting. This may be related to the fact that the epithelium in the meatus and urethra is perhaps more akin to some areas of the cervix, where more experience has been gained in interpreting histological changes. Most interesting of all was the observation that HPV DNA was not found in histologically normal skin. This is in agreement with our findings in a series of penile biopsies that did not show histological evidence of HPV infection (unpublished). HPV DNA was detected using the PCR in only 1 (3%) of 35 biopsies. This is in contrast to the findings in the female genital tract, where HPV may be detected in histologically normal tissue[13] and suggests that the epidemiology of HPV in men may be fundamentally different.

Penoscopy undoubtedly has a role in attempting to understand the epidemiology of HPV infections. However, in view of the limitations of sensitivity and specificity highlighted by Hippeläinen *et al*, enthusiastic calls for its widespread introduction into routine clinical practice[14] should be treated with caution. More disturbing are the recommendations of some authors[4] for extensive ablation of penoscopically abnormal areas. In view of the considerable anxiety already suffered by some of these patients, we prefer to wait for the results of further carefully controlled studies to determine the value of penoscopy before offering it routinely.

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NOTICES

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18th World Congress of Dermatology—New York, 12–18 June 1992

The next (18th) World Congress of Dermatology will take place in New York City from 12–18 June 1992. "*Dermatology—Progress and Perspectives*" is the theme of the 6 day programme, focusing on the most recent advances and important issues in worldwide dermatology, and future directions in research and therapy. The Congress will provide a stimulating educational experience and a unique opportunity for dermatologists to interact with colleagues from all over the world.

John S Strauss has been named President of the Congress, and Stephen I Katz will serve as the Secretary General. Honorary Presidents are Rudolf L Baer and Clarence S Livingood. Alan R Shalita is the Deputy Secretary General.

The preliminary programme, abstract forms, and registration materials can be obtained from the 18th Congress Secretariat, 22 Euclid Street, Woodbury, NJ 08096, USA.